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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R4-ES-2019-0050; FF09E21000 FXES1111090FEDR 223]

RIN 1018–BE15

Endangered and Threatened Wildlife and Plants; Endangered Species Status for Marron Bacora and Designation of Critical Habitat

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are listing marron bacora (*Solanum conocarpum*), a plant species from the U.S. and British Virgin Islands, as an endangered species and are designating critical habitat for the species under the Endangered Species Act of 1973, as amended (Act). In total, approximately 2,548 acres (1,031 hectares) on St. John, U.S. Virgin Islands, fall within the boundaries of the critical habitat designation. This rule adds this species to the Federal List of Endangered and Threatened Plants and extends the Act's protections to the species and its designated critical habitat.

DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: This final rule is available on the internet at *https://www.regulations.gov* in Docket No. FWS-R4-ES-2019-0050. Comments and materials we received, as well as supporting documentation we used in preparing this rule, are available for public inspection in the docket on *https://www.regulations.gov*. For the critical habitat designation, the coordinates or plot points or both from which the maps are generated are included in the decision file for the critical habitat designation and

are available at the Caribbean Ecological Services Field Office's website (*https://www.fws.gov/office/caribbean-ecological-services/library*) and at *https://www.regulations.gov* under Docket No. FWS-R4-ES-2019-0050.

FOR FURTHER INFORMATION CONTACT: Edwin Muñiz, Field Supervisor, U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office, P.O. Box 491, Road 301 Km 5.1, Boquerón, PR 00622; telephone 787–244–0081; email caribbean_es@fws.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, a species warrants listing if it meets the definition of an endangered species (in danger of extinction throughout all or a significant portion of its range) or a threatened species (likely to become endangered in the foreseeable future throughout all or a significant portion of its range). We have determined that the marron bacora meets the definition of an endangered species; therefore, we are listing it as such. To the maximum extent prudent and determinable, we must designate critical habitat for any species that we determine to be an endangered or threatened species under the Act. Listing a species as an endangered or threatened species and designation of critical habitat can be completed only by issuing a rule.

What this rule does. This rule lists marron bacora (*Solanum conocarpum*) as an endangered species under the Act and designates approximately 2,548 acres (ac) (1,031 hectares (ha)) on St. John, U.S. Virgin Islands (USVI), as critical habitat for the species.

The basis for our action. Under the Act, we may determine that a species is an

endangered or threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that the primary threats acting on marron bacora are habitat destruction or modification by exotic mammal species (e.g., white-tailed deer, goats, pigs, and donkeys) and invasive plants and exotic plants (e.g., guinea grass) (Factor A); herbivory by nonnative, feral ungulates and insect pests (Factor C); and the lack of natural recruitment, absence of dispersers, fragmented distribution and small population size, lack of genetic diversity, and climate change (Factor E).

Section 4(a)(3) of the Act requires the Secretary of the Interior (Secretary) to designate critical habitat concurrent with listing to the maximum extent prudent and determinable. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat. We are designating 2,548 ac (1,031 ha), consisting of two units on St. John, USVI, as critical habitat for marron bacora in this rule. We have excluded 1.33 ac (0.54 ha) from the South Unit.

Previous Federal Actions

Please refer to the proposed rule to list and designate critical habitat for the marron bacora (85 FR 52516; August 26, 2020) for a detailed description of previous Federal actions concerning this species.

Summary of Changes from the Proposed Rule

This final rule incorporates changes to our proposal (85 FR 52516; August 26, 2020) based on the comments we received, as discussed below under **Summary of Comments and Recommendations**. Based on these comments, we also incorporated, as appropriate, new information into our SSA report. Minor, nonsubstantive changes and editorial corrections were made throughout both documents in response to comments. However, the information we received during the public comment period on the proposed rule did not change our determination that the marron bacora meets the definition of an endangered species. The information provided a better understanding of a finer scale of the proposed critical habitat units, and we applied changes accordingly.

Specifically, based on new information received from a private landowner in a letter dated October 26, 2020, and after considering the benefits of exclusion versus the benefits of inclusion, we revised Unit 1 (South Unit) to exclude 1.33 acres (0.54 ha) from the critical habitat designation. This unit now consists of approximately 1,704 ac (690 ha), which is a decrease of approximately 0.06 percent of the area proposed for Unit 1. Because of this exclusion, we revised the index and relevant unit maps, and we updated the coordinates or plot points from which those maps were generated. The information is available at *https://www.regulations.gov* under Docket No. FWS-R4-ES-2019-0050, and from the Caribbean Ecological Services Field Office website at *https://www.fws.gov/office/caribbean-ecological-services/library*.

Supporting Documents

A species status assessment (SSA) team prepared an SSA report for the marron bacora. The SSA team was composed of Service biologists, in consultation with other species experts. The SSA report represents a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species (Service 2020, entire).

In accordance with our joint policy on peer review published in the *Federal Register* on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing actions under the Act (16 U.S.C. 1531 *et seq*.), we sought the expert opinions of six appropriate specialists regarding the initial SSA report, version 1.0 (Service 2019, entire). We received comments from one of the six reviewers. The reviewer was generally supportive of our approach and made suggestions and comments that strengthened our analysis. We also considered all comments and information we received during the comment period. The SSA report, version 1.1 (Service 2020, entire), and other materials relating to this rule can be found at *https://www.regulations.gov* under Docket No. FWS-R4-ES-2019-0050.

I. Final Listing Determination

Background

A thorough review of the taxonomy, life history, and ecology of the marron bacora is presented in the SSA report (Service 2020, entire).

Marron bacora is a dry-forest, perennial shrub of the Solanaceae (or nightshade) family that is endemic to the Virgin Islands. It has small purple flowers and can grow to a height of around 9.8 feet (ft) (3 meters (m)). The plants produce a green fruit with white striations and golden yellow when ripe (Acevedo-Rodriguez 1996, p. 415). The species typically requires pollinators for reproductive success but may self-pollinate under certain

conditions.

The historical range of the species includes St. John and possibly St. Thomas, USVI; however, recent surveys found the species on the neighboring island, Tortola, British Virgin Islands (BVI). An additional, unconfirmed record from plant material was collected in 1969 at Gordon Peak on Virgin Gorda, BVI (Acevedo-Rodríguez 1996, p. 415). Suitable habitat for the species occurs on Virgin Gorda; however, that is the only record of the species on that island, and there have been no other records since the single plant was found in 1969. At least three populations on St. John have been extirpated.

The species is currently found on St. John, USVI, and Tortola, BVI, with a fragmented distribution of seven populations on St. John (Nanny Point, Friis Bay, Johns Folly, Brown Bay Trail, Reef Bay Trail, Base Hill, Brown Bay Ridge, Sabbat Point, Reef Bay Valley, and Europa Ridge) and a single population on Tortola (Sabbath Hill). St. John has a history of land-use changes that resulted in habitat loss and degradation, further isolating suitable habitats in patches that were not readily connected. The flowers of marron bacora plants have both anthers and pistols with morphological characteristics to differentiate the male and female plants; the male plants have long anthers with shorter pistils while the female plants have short, recurved anthers with an elongated pistil. Even though the flowers are hermaphroditic, the species is functionally dioecious (separate male and female plants) obligate out-crosser and typically self-incompatible (Anderson et al. 2015, p. 479), so the larger the population, the better for ensuring successful reproduction and maintaining genetic diversity within populations.

Please refer to the proposed listing rule for the marron bacora (85 FR 52516; August 26, 2020) for more species information.

Regulatory and Analytical Framework

Regulatory Framework

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species is an endangered species or a threatened species. The Act defines an "endangered species" as a species that is in danger of extinction throughout all or a significant portion of its range, and a "threatened species" as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term "threat" to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term "threat" includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term "threat" may encompass—either together or separately—the source of the action or condition or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an "endangered species" or a "threatened species." In determining whether a species meets either definition, we must evaluate all identified threats by considering the expected response by the species, and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an "endangered species" or a "threatened species" only after conducting this cumulative analysis and describing the expected effect on the species now and in the foreseeable future.

The Act does not define the term "foreseeable future," which appears in the statutory definition of "threatened species." Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis. The term "foreseeable future" extends only so far into the future as the Service can reasonably determine that both the future threats and the species' responses to those threats are likely. In other words, the foreseeable future is the period of time in which we can make reliable predictions. "Reliable" does not mean "certain"; it means sufficient to provide a reasonable degree of confidence in the prediction. Thus, a prediction is reliable if it is reasonable to depend on it when making decisions.

It is not always possible or necessary to define foreseeable future as a particular number of years. Analysis of the foreseeable future uses the best scientific and commercial data available and should consider the timeframes applicable to the relevant threats and to the species' likely responses to those threats in view of its life-history

characteristics. Data that are typically relevant to assessing the species' biological response include species-specific factors such as lifespan, reproductive rates or productivity, certain behaviors, and other demographic factors.

Analytical Framework

The SSA report documents the results of our comprehensive biological review of the best scientific and commercial data regarding the status of the species, including an assessment of the potential threats to the species. The SSA report does not represent a decision by the Service on whether the species should be listed as an endangered or threatened species under the Act. It does, however, provide the scientific basis that informs our regulatory decisions, which involve the further application of standards within the Act and its implementing regulations and policies. The following is a summary of the key results and conclusions from the SSA report, version 1.1; the full SSA report (Service 2020, entire) can be found at Docket No. FWS-R4-ES-2019-0050 on *https://www.regulations.gov*.

To assess marron bacora's viability, we used the three conservation biology principles of resiliency, redundancy, and representation (Shaffer and Stein 2000, pp. 306–310). Briefly, resiliency supports the ability of the species to withstand environmental and demographic stochasticity (for example, wet or dry, warm or cold years), redundancy supports the ability of the species to withstand catastrophic events (for example, droughts, large pollution events), and representation supports the ability of the species to adapt over time to long-term changes in the environment (for example, climate changes). In general, the more resilient and redundant a species is and the more representation it has, the more likely it is to sustain populations over time, even under changing environmental conditions. Using these principles, we identified the species' ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing the species' viability.

The SSA process can be categorized into three sequential stages. During the first stage, we evaluated the individual species' life-history needs. The next stage involved an assessment of the historical and current condition of the species' demographics and habitat characteristics, including an explanation of how the species arrived at its current condition. The final stage of the SSA involved making predictions about the species' responses to positive and negative environmental and anthropogenic influences. Throughout all of these stages, we used the best available information to characterize viability as the ability of a species to sustain populations in the wild over time. We use this information to inform our regulatory decision.

Summary of Biological Status and Threats

In this discussion, we review the biological condition of the species and its resources, and the threats that influence the species' current and future condition, in order to assess the species' overall viability and the risks to that viability.

The stressors acting on the species as described in the SSA report include invasive species (plants and animals), predation, demographic and genetic consequences of small population size and density, human-induced fires, insect pests and pathogens, changes in phenology and breeding systems, climate change/hurricanes, and habitat loss/degradation.

Species Needs

In order to understand the species' viability, we considered the best available information in describing the species' needs, including habitat, reproduction, and other environmental influences such as precipitation. We provide an overview of the species' suitable habitat description and conditions for successful reproduction.

With marron bacora's endemism on two islands, the habitat is primarily based on forest type, soil characteristics, and elevation. The species occurs in dry, deciduous forest with dry soils (Acevedo-Rodríguez 1996, p. 415). Marron bacora plants are locally

abundant in exposed sites that have been disturbed by erosion as well as in areas that have received moderate grazing, and around ridgelines as an understory component in diverse woodland communities (Carper and Ray 2008, p. 1). A habitat suitability model suggests that the vast majority of marron bacora habitat is found in the lower elevation (<85m, 278.87 ft) coastal scrub forest and that about 32 percent of the land area of the Virgin Islands National Park (VINP) harbors suitable habitat for the species (Vilella and Palumbo 2010, p. 10).

The majority of the marron bacora habitat lies within the subtropical dry life zone, which is characterized by low annual rainfall and a high evapotranspiration ratio (Ewel and Whitmore 1973, p.10). In fact, more than 80 percent of St. John is considered as subtropical dry forest (Stanford et al. 2013, p.173). The vegetation in the subtropical dry life zone tends to form a complete ground cover and is almost completely deciduous (Ewel and Whitmore 1973, p. 10). As an endemic to the Virgin Islands, marron bacora is adapted to these environmental conditions, and the species' phenology is synchronized with the rainy season. Most of the yearly rainfall on St. John occurs between May and December with official hurricane season from June 1 through November 30.

In terms of successful reproduction for the species, the system of breeding in marron bacora is very likely to be that of an obligate outcrosser with self-incompatibility (Stanford et al. 2013, pp. 174; Anderson et al. 2015, pp. 479). Recent findings support the hermaphroditic and functionally dioecious biology of marron bacora (Anderson et al. 2015, p. 479). There has been fruit production recorded on isolated plants suggesting the species still has mechanisms for self-pollination (Gibney pers. comm.).

Stressors Acting on the Species

The species is impacted by natural and anthropogenic influences that may affect individual plants, the habitat, or populations in varying degrees. The magnitude, timing, frequency, and severity of the threats are influenced by additional biological and physical

factors associated with the species' habitat. We provide a brief overview of those stressors and additional information can be found in the proposed listing rule (85 FR 52516) and in the SSA report (Service 2020, pp. 34–41).

Nonnative/Invasive Species

Marron bacora and its habitat are directly affected by nonnative animals and plants. White-tailed deer (*Odocoileus virginianus*) were introduced to St. John in the 1920s to provide hunting opportunities. Since then, the deer range freely across the island, foraging on the native vegetation, and according to local experts, populations of deer are increasing on the island (E. Gibney, pers comm. 2017). There are currently no estimates on the deer abundance on St. John, and with no native predators to control the deer population, they are naturalized and very abundant on the islands. The deer directly affect marron bacora by browsing on the plants (seedlings and saplings) and fruits, thus, precluding the species natural recruitment.

Other nonnative species used as livestock, including cattle, hogs (*Sus scrofa*), goats (*Capra aegagrus hircus*), and donkeys (*Equus africanus asinus*), have also naturalized and have been recorded within the VINP. Depredation of marron bacora fruits and seedlings by feral ungulates has most likely caused the lack of natural recruitment. Deer and livestock not only forage on marron bacora plants, but they also trample plants and degrade the habitat conditions.

Invasive plant species are also abundant on St. John and Tortola and outcompete native species for space, water, and light as they change the structure of the vegetative community and restrict available resources for native species. The marron bacora habitat at Nanny Point has been negatively affected by encroachment of invasive exotic grasses and vines following Hurricanes Irma and Maria in 2017 (IC Report 2018, pp. 3, 12). These exotic and invasive species outcompete marron bacora and further reduce the chances of natural recruitment by modifying the microhabitat conditions necessary for

seedling establishment. The threat by invasive plant species is more severe at the biggest known populations of marron bacora, Nanny Point (USVI) and Sabbat Hill (BVI).

Insect Pests and Pathogens

Although the majority of known marron bacora populations are relatively protected because they are found on lands managed for conservation by NPS, the small size of populations coupled with the effects of insect pests or pathogens could contribute to local extirpation. For example, although the Reef Bay Valley population consisted of 6 wild individuals and 60 introduced individuals in 2011, the population was considered extirpated by 2017, most likely due to a low survival rate for the introduced marron bacora individuals. However, an unknown pathogen was documented in that population (Stanford et al. 2013, p. 178), which also may have contributed to its loss. More recently, in 2018, 63 percent of the marron bacora individuals at Nanny Point showed some sort of stem dieback; however, it is not clear if this is due to some pest or disease (IC Report 2018, p. 5). Nonetheless, recent observations indicate that dieback is clustered mainly to the eastern corner of the Nanny Point population and associated with edge vegetation (vines and shrub land vegetation exposed to salt spray).

In addition, we recorded the presence of the Jacaranda bug (*Insignorthezia insignis*) at the Nanny Point population, and the scale insects, *Praelongorthezia praelonga* (Douglas) and *Insignorthezia insignis*, on plants at the gardens of the National Park Service (NPS) facilities (Service 2017a, p. 14). The Jacaranda bug is a sap-feeding insect in the *Orthezidae* family. The scale insect (*Praelongorthezia praelonga*) can also damage plants directly by sucking their sap, or indirectly by injecting toxic salivary secretions that may attract ants, transmit pathogens, and encourage growth of sooty molds (Ramos et al. 2018, p. 273). Our assessment of the effects of these insects and pathogens on marron bacora is based on the information available regarding their effects on other species of plants that occur on St. John (e.g., Ramos et al. 2018, p. 273), and on our

observations in the field during marron bacora assessments (Monsegur and Yrigoyen 2018, pers. comm.). No studies have been carried out to ascertain the extent of potential impacts by these pests specifically on marron bacora. However, the low number and small size of the known populations makes marron bacora vulnerable to insect pests, which may constrain the already reduced reproductive output and recruitment of the species.

Effects of Small Population Sizes

The consequences of small population sizes affect sessile species by limiting the ability to interact with others and maintain genetic diversity. Marron bacora currently shows overall low numbers of individuals, low numbers of populations, and low numbers of individuals at each population site, which is reflected in low resiliency, redundancy, and representation. While the genetic diversity at the species level of marron bacora is relatively high, the majority of its diversity is confined to the largest population at Nanny Point (Stanford 2013, p. 178). The current fragmented population distribution may result in Allee effects due to small population sizes, a lack of genetic exchange among populations, and eventual genetic drift. Allee effects influence the individual fitness of plants; with smaller, less dense populations, successful reproduction declines because there are fewer pollination opportunities between individual plants that have a greater distance between them.

Habitat Loss/Degradation

By 1717, the forested landscape of St. John was parceled into more than 100 estates for agriculture (i.e., sugarcane and cotton), and the majority of this landscape was deforested. Under this land-use regime, marron bacora populations were decimated, as the species had no economic importance or use. The current fragmented distribution of marron bacora is most likely the result of that historical land clearing for agriculture and the subsequent development that has occurred since the 1700s. Even though these land-

use changes occurred centuries ago, long-lasting effects continue to impact the condition of the habitat; the effects on the species are exacerbated by the species' reproductive biology, the absence of seed dispersal, suspected fruit predation, and further habitat modification by feral ungulates.

At present, the Friis Bay (St. John, USVI) and Sabbath Hill (Tortola, BVI) populations are located on private lands vulnerable to habitat modification due to urban development. In addition, the Nanny Point and Johns Folly populations are situated within VINP lands just at the park boundary, and there is potential for urban and tourism development in the future, resulting in possible direct impacts to the species and interrelated effects (lack of habitat connectivity and cross pollination, and further habitat encroachment by exotic plant species). While the land that harbors the Nanny Point population is located on VINP, the adjacent private land could be at risk of development, which may directly affect the species' most resilient population.

Climate Change and Hurricanes

Hurricanes and tropical storms frequently affect the islands of the Caribbean; thus, native plants should be adapted to such disturbance. In fact, successional responses to hurricanes can influence the structure and composition of plant communities in the Caribbean islands (Van Bloem et al. 2005, p. 576). However, climate change is predicted to increase tropical storm frequency and intensity and also cause severe droughts (Hopkinson et al. 2008, p. 255). Climate model simulations indicate an increase in global tropical cyclone intensity in a warmer world, as well as an increase in the number of very intense tropical cyclones, consistent with current scientific understanding of the physics of the climate system (USGCRP 2018, p. 2). The vulnerability of species to climate change is a function of sensitivity to changes and exposure to those changes, and the adaptive capacity of the species (Glick et al. 2011, p. 1). Within natural conditions, it is likely that marron bacora is well-adapted to these atmospheric events. However, the

cumulative effects of severe tropical storms and associated increased sediment runoff (erosion), along with the species' small population size and reduced natural recruitment, may jeopardize the future establishment of seedlings along drainage areas usually associated with suitable habitat for marron bacora (Ray and Stanford 2005, p. 2). There is evidence of direct impacts to the Nanny Point population due to a flash flood event associated with Hurricane Irma that hit St. John on September 6, 2017 (Service 2017b, p. 3).

Additive climate change stressors projected for the future include: (a) increased number and intensity of strong storms, (b) increased temperatures, and (c) shifts in the timing and amounts of seasonal precipitation patterns. Despite projected increased storm intensity and frequency related to future hurricane seasons, climate change models for tropical islands predict that, for example, by the mid-21st century, Puerto Rico will be subject to a decrease in overall rainfall, along with an increase in annual drought intensity (Khalyani et al. 2016, pp. 274–275). Thus, due to the proximity of Puerto Rico to St. John, and that these islands belong to the same biogeographical unit (Puerto Rican Bank), these model predictions could also extend to the USVI (including St. John). Given the low number of known populations and individuals, and the lack of natural recruitment of marron bacora, the species may not have the genetic breadth to adapt to these predicted conditions. In addition, there is little knowledge of marron bacora's life history (e.g., fruit/seed dispersers and germination requirements in the wild); the species has a restricted known range (e.g., mainly St. John); and its habitat is degraded due to free-ranging populations of feral animals (e.g., deer and goats), which precludes recruitment of new individuals. Moreover, in 2017, the island of St. John was affected by two catastrophic hurricanes (Irma and Maria), resulting in direct adverse impacts to individuals of marron bacora and its habitat. Marron bacora habitat remains encroached

by weedy plants that persist more than 2 years after these atmospheric events and continue to affect the species.

Synergistic Effects

Synergistic interactions are possible between the effects of climate change and other potential threats such as nonnative species, pests, and development. The extent of impacts to the species due to synergistic threats is not well understood, as there is uncertainty in how nonnative species (plants and animals) may respond to climate variables such as increased drought and changes in hurricane frequency and intensity. We expect the synergistic effects of the current and future threats acting on the species will exacerbate the decline in the species' viability by continued declines in reproductive success. Projecting the extent of synergistic effects of climate change on marron bacora is too speculative due to the complexity and uncertainty of the species' response to the combination of dynamic factors that influence its viability.

We note that, by using the SSA framework to guide our analysis of the scientific information documented in the SSA report, we have not only analyzed individual effects on the species, but we have also analyzed their potential cumulative effects. We incorporate the cumulative effects into our SSA analysis when we characterize the current and future condition of the species. To assess the current and future condition of the species, we undertake an iterative analysis that encompasses and incorporates the threats individually and then accumulates and evaluates the effects of all the factors that may be influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative effects analysis.

Existing Regulatory Mechanisms and Conservation Efforts

The existing regulatory mechanisms for marron bacora include Federal and Territory protections of the species that include NPS Organic Act and U.S. Virgin Island's Department of Planning and Natural Resources listing of the species. The NPS' Organic Act (54 U.S.C. 100101 *et seq*.) requires the NPS to manage the national parks, including the VINP on St. John, to conserve their scenery, natural and historic objects, and wildlife. In addition, the National Parks Omnibus Management Act of 1998 (Pub. L. 105–391), Title II, "National Park System Resource Inventory and Management," mandates research in order to enhance management and protection of national park resources by providing clear authority and direction for the conduct of scientific study in the National Park System and to use the information gathered for management purposes. This law affects not only the NPS, but other Federal agencies, universities, and other entities that conduct research within the National Park system. Currently, the NPS has implemented its resource management responsibilities through its management policies, section 4.4.1, which state that NPS "will maintain as parts of the natural ecosystems of parks all plants and animals native to park ecosystems" (NPS 2006, p. 42).

The Territory of the U.S. Virgin Islands currently considers marron bacora to be endangered under the Virgin Islands Indigenous and Endangered Species Act (V.I. Code, title 12, chapter 2), and an existing regulation provides for protection of endangered and threatened wildlife and plants by prohibiting the take, injury, or possession of indigenous plants. While these efforts and mechanisms provide some protections for the species, they have not substantively reduced the main factors affecting the species' viability.

Efforts to conserve the species have included a captive propagation and planting program. Marron bacora has successfully been propagated by a St. John horticulturist with cuttings and manually assisting pollination by dusting the flowers (B. Kojis and R. Boulon, pers comm., November 20, 1996). Marron bacora specimens were then distributed to various places with suitable habitat in the Virgin Islands (Ray and Stanford

2005, p. 3). An implementation plan was developed to conduct shade-house propagation of marron bacora using both seedlings and cuttings for reintroduction within VINP (Ray and Stanford 2003, p. 3). A Nanny Point landowner funded and implemented a conservation plan for marron bacora through germination and cloning of adult individuals to enhance natural populations of the species at Nanny Point, Brown Bay Trail, and Johns Folly (Ray and Carper 2009, p. 6; Ray 2005, p. 4). Under this conservation plan, all individuals of marron bacora at Nanny Point were flagged and tagged, had their basal diameter and height measured, and were georeferenced (Ray 2005, p. 3). This plan resulted in the propagation of at least 300 cuttings and their latter planting to augment natural populations (Ray 2005, p. 6). Such efforts continued with the enhancement (augmentation) of the Brown Bay Trail, Johns Folly, and Nanny Point populations by planting cutting material; these efforts saw overall survival of 97 percent 2 months after planting, but the plants' long-term survival proved to be low due to ongoing threats to the habitat (Ray and Carper 2009, p. 5). While the species has been successfully propagated, the reintroductions have yielded unsuccessful results with a very low long-term survival rate for propagated and reintroduced plants, and even lower for relocated adult plants.

In 2017, funding was provided to Island Conservation through the Service's Coastal Program to: (1) Propagate at least 100 marron bacora individuals to enhance the largest known population at Nanny Point, (2) introduce propagated materials to the Nanny Point population, (3) assess the extent of impacts of invasive mammal species to marron bacora and its habitat, (4) assess the extent of impacts by invasive mammal species to additional sites identified for marron bacora introduction, and (5) provide management recommendations for invasive mammals in order to significantly advance the recovery of marron bacora (IC Report 2018, p. 1). This project has been temporarily delayed in order to allow archaeological surveys to be completed prior to any out-planting.

Current Conditions

To determine the current condition of the species, we evaluated the resiliency, redundancy, and representation of populations across the landscape considering past and current stressors acting on the species and its habitat. The description of the species' current condition is described in more detail in the SSA report (Service 2020, pp. 19–28).

Resiliency

We generated resiliency scores using the best available information for marron bacora by combining scores for three habitat metrics (protection/development risk, feral ungulates, and pest depredation), and one population metric (population size and/or trend, dependent on availability). The scores for each population across all metrics were summed, and final population resilience categories were assigned (see Table 2, below).

Table 1. Description of how habitat and population factors were scored to determine marron bacora resilience.

	Habitat Metrics			**Population Metric**
Score	**Habitat Protection/ Development Risk**	**Feral Ungulates**	**Pest Presence/ Depredation**	**Population Size/Trend**
-1	Habitat not protected, at risk of being developed	High number of exotic mammals	High number of pests present	Relatively low population size and/or declining trend
0	Some habitat protected, and some at risk of being developed	Unknown or moderate number of exotic mammals	Moderate number of pests present	Relatively moderate population size and stable trend, or high degree of uncertainty in population size/trends
1	Habitat protected	Exotic mammals absent	Pests absent	Relatively high population size and/or growth

Table 2. Resiliency score categories for marron bacora using habitat and demographic metrics.

Resiliency Scores	
Low Resilience	-4 to -2
Moderately Low Resilience	-1
Moderate Resilience	0
Moderately High Resilience	1

High Resilience	2 to 4

The species is known from two islands with 11 known populations, of which 3 are extirpated. The resiliency of the extant populations varies according to the abundance of individuals and habitat conditions at each location. The remaining eight extant populations vary between a single individual to 201 plants, and the habitat conditions vary according to the site location. Additional information regarding the details of the populations can be found in the proposed listing rule (85 FR 52516).

Nanny Point (St. John, USVI)

The largest known population is on St. John at Nanny Point; in 2017, this population consisted of 75 mature adult individuals, 4 natural seedlings, and 44 planted individuals from past population enhancement efforts (Service 2017a, p. 7). This population has been negatively affected by herbivory, hurricanes, invasive plants, and the Jacaranda bug. The Nanny Point population has low resilience because, while the site is partially within VINP, it also overlaps with unprotected, private lands; the population has a high presence of feral ungulates, high insect predation, and a declining population size.

Friis Bay (St. John, USVI)

With the discovery of a new population in the BVI, this is now believed to be the third largest natural population of marron bacora, with an estimated 33 individuals (Ray and Stanford 2005, p. 16). The current resilience of the Friis Bay population is low because the habitat is at risk of high impacts from feral ungulates.

Johns Folly (St. John, USVI)

This site is located upslope in a ravine about 700 m (2,296.6 ft) northwest of the Nanny Point population. A 2017 population assessment identified only 4 natural individuals and 1 natural seedling, and 13 plants corresponding to planted material from a previous population enhancement with material from the Nanny Point population (Service 2017a, p. 7). The Johns Folly population has low resilience due to habitat loss

and fragmentation by development, low density of pollinators, high presence of feral ungulates, and a declining population.

Brown Bay Trail (St. John, USVI)

The Brown Bay Trail site is located along the Brown's Bay hiking trail within the VINP, an area of mature secondary dry forest located on the northeastern shore of St. John. The site is located on a slope approximately 60 m (196.85 ft) from shore and the population is composed of a single natural individual and planted individuals that were part of a 2009 population enhancement using material propagated from the Nanny Point population. The Brown Bay Trail population has low resilience due to high presence of feral ungulates, high insect predation, and a declining population trend.

Reef Bay Trail (St. John, USVI)

The Reef Bay Trail locality is a relatively new population located during a 2017 population assessment (Service 2017a, p. 11). A population assessment in 2017 discovered seven wild individuals, 85 percent in flower and some individuals producing fruits. The Reef Bay Trail population has moderately low resilience due to high presence of feral ungulates that are causing an overall decline across all populations (Roberts 2017, entire).

Base Hill (St. John, USVI)

The population at Base Hill consists of one natural individual (Ray and Stanford 2005, p. 16). There have been no subsequent visits to this population since 2005; thus, no further data on the status of this individual are known. The current condition of this population is unknown.

Brown Bay Ridge (St. John, USVI)

In 2017, one wild individual was discovered on top of a ridge approximately 0.25 miles (mi) (0.40 kilometers (km)) from the Brown Bay Trail population (Cecilia Rogers 2017, pers. comm.). The Brown Bay Ridge population has moderately low resilience

because, while there is a high presence of feral ungulates in the area, the area harbors suitable habitat and the single documented wild individual was a juvenile plant, which indicates recruitment has occurred at this location.

Sabbat Point (St. John, USVI)

This population was reported as a single natural individual in 2005 (Ray and Stanford 2005, p. 16). The individual was never relocated in a subsequent site visit, and the site showed evidence of disturbance based on the abundance of river tamarind (*Leucaena leucocephala*), roving prickly pear cactus (*Opuntia repens*), and wild pineapple (*Bromelia pinguin*) (Service 2017a, p. 4). This population is considered extirpated.

Reef Bay Valley (St. John, USVI)

This population is on the southern coast of St. John, along the shore near White Cliffs. In 2005, 6 wild and 60 introduced individuals were reported at the Reef Bay site (Ray and Stanford 2005, p. 16). Further assessments of this area were unsuccessful in detecting any marron bacora (Service 2017a, p. 11). Thus, the best available information indicates this population is extirpated, and no individuals are known in its proximity.

Europa Ridge (St. John, USVI)

The Europa Ridge population was a single individual when documented in the early 1990s (Acevedo-Rodriguez, P. 1996, p. 415). Based on the latest habitat assessments by the Service, this population is likely extirpated (Service 2017a, p. 11).

Sabbath Hill (Tortola, BVI)

In 2018, surveys on Tortola identified a plant morphologically consistent with marron bacora, near Sabbath Hill. On a follow-up trip to confirm marron bacora in the area, a population of approximately 46 to 48 individuals was identified with most plants described as small and only about 7 as large. The Sabbath Hill population has low

resilience due to a high presence of feral ungulates and the location of the population not being associated with any protected lands.

There is little evidence of sustained natural recruitment in any of the known populations of marron bacora. The population structure at Nanny Point and Johns Folly is characterized by the absence of individuals smaller than 3.2 ft (1 m) high, with little evidence of seedlings or juveniles (three for Nanny Point and one for Johns Folly) (Service 2017a, p. 7). These populations consist primarily of reproductive individuals, as 92 percent and 75 percent of the plants, respectively, were recorded in flower during a recent survey (Service 2017a, p. 7). The Johns Folly population was composed of 4 natural adult individuals (reproductive size individuals naturally occurring at this site) or 36 percent of the total (11 plants) (Service 2017a, p. 9).

All eight extant populations are declining and have moderately low to low resiliency; many populations are on the brink of extirpation. The entire species consists of 324 known individuals, with 201 of those plants located within a single population (Nanny Point).

Redundancy and Representation

The species is showing very low to no natural recruitment across all populations. Only three populations have more than 18 individuals, two populations have 18 individuals, and the three remaining populations have 7 or fewer individuals. Most of the populations are small and isolated with little to no connectivity. Marron bacora currently shows overall low numbers of individuals, low numbers of populations, and low numbers of individuals at each population site. The overall resiliency, redundancy, and representation of this species are low.

Future Conditions

As part of the SSA, we developed multiple future condition scenarios to capture the range of uncertainties regarding future threats and the projected responses by marron

bacora. Our scenarios included a status quo scenario, which incorporated the current risk factors continuing on the same trajectory that they are on now. We also evaluated two additional future scenarios, one that considered increasing levels of risk factors resulting in elevated negative effects on marron bacora populations. The other scenario considered improved environmental and habitat conditions through conservation actions including land management and invasive plant and animal management. However, we determined that the current condition of marron bacora and the projections for all scenarios are consistent with an endangered species status (see **Determination of Marron Bacora's Status**, below); we are not presenting the results of the future scenarios in this rule. Please refer to the SSA report (Service 2020, pp. 53–63) for the full analysis of future conditions and descriptions of the associated scenarios.

Please refer to the proposed listing rule (85 FR 5216) and the SSA report (Service 2020, entire) for a more detailed information regarding the evaluation of the marron bacora's biological status, the influences that may affect its continued existence, and the modeling efforts undertaken to further inform our analysis.

Summary of Comments and Recommendations

In the proposed rule published on August 26, 2020 (85 FR 52516), we requested that all interested parties submit written comments on the proposal by October 26, 2020. We received eight comments, of which four were substantive. We also contacted appropriate Federal (NPS) and State/Territory (USVI Department of Planning and Natural Resources (DPNR)) agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. We did not receive any comments from NPS regarding the SSA report or the proposed rule. The DPNR comments are summarized below. A newspaper notice inviting general public comments was published in The Virgin Islands Daily News on August 28, 2020. We did not receive any requests for a public hearing. All substantive information provided during the

comment period has either been incorporated directly into the SSA report or this final rule or is addressed below.

Peer Reviewer Comments

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinion from knowledgeable individuals with scientific expertise that included familiarity with the marron bacora and its habitat, biological needs, and threats. During development of the SSA report, we reached out to six peer reviewers and received responses from one. We reviewed all comments received from the peer reviewer for substantive issues and new information regarding the marron bacora. All comments were incorporated into the SSA report prior to the proposed rule. The reviewer provided editorial and technical comments that were generally supportive of our approach; the commenter made suggestions and comments that strengthened our analysis and improved the SSA report. Peer reviewer comments are addressed in the following summary and were incorporated into the SSA report and, accordingly, in this final rule as appropriate.

(1) *Comment:* One peer reviewer noted that the Service did not consider pollinator loss as a threat to the species. Most *Solanum* spp. require a specific type of bee for "buzz" pollination, where the motion of vibrating bees facilitates pollen exchange. The peer reviewer suggested pollinator limitation (or bee die-off) could be another cause of marron bacora's rarity. The reviewer provided a reference regarding morphology of the genus that facilitated pollination (Falcão et al. 2016, entire).

Response: We acknowledge declines in pollinators across the globe due to a multitude of environmental stressors; however, fruit production has been observed in wild populations and cultivated plants indicative of successful pollination. The reference provided, Falcão et al. 2016, describes the reproductive morphology and pollen release mechanisms in the congener, *Solanum luridifuscescens*. Some of the information in the

paper provides descriptions for *Solanum* in general that support information in the SSA report, such as the lack of nectaries and pollen as the only reward (Service 2020, p. 31). The SSA report acknowledges observations by Service staff of abundant activity of the native carpenter bees (*Xylocopa mordax*) visiting the flowers of marron bacora consistent with a massive flowering and fruiting event (Service 2017a, p. 7). At present, the island of St. John no longer implements large-scale agriculture using pesticides, which may contribute to the loss of pollinators. In addition, the majority of the habitat on St. John is a forested landscape designated as a National Park and managed by NPS. Therefore, the best available science does not indicate pollinator loss is a current threat to the species.

Territory Comments

(2) *Comment:* The USVI DPNR supported our decision that marron bacora is in danger of extinction and highlighted the need to address the possible adverse effects on the species' viability due to predation by feral animals. The agency also provided comments on the proposed critical habitat designation that acknowledge much of the proposed critical habitat is located within protected lands currently managed by NPS. However, the comment indicated that there are areas adjacent to NPS lands zoned for development that fall within the proposed designated critical habitat and recommended that the Service make every effort to avoid including in the critical habitat designation any developed areas where land is covered by buildings, pavement, or other structures. The area identified by the agency also includes areas that are not yet developed but are zoned for development under U.S. Virgin Islands Code, title 29 "Public Planning and Development," chapter 3 "Virgin Islands Zoning and Subdivision Law" (see section 228 for all uses).

Response: As described in the proposed critical habitat rule, critical habitat does not include human made structures (such as buildings, aqueducts, runways, roads, and

other paved areas) or the land on which they are located, so these features within designated units are not considered critical habitat.

Regarding the adjacent areas that are zoned but not yet developed, the DPNR did not provide specific information regarding how critical habitat may impact those areas or how the benefits of exclusion outweigh the benefits of inclusion. Therefore, in the absence of supporting information about the benefits of exclusion, we determined that these areas meet the definition of critical habitat and have no basis to exclude those areas.

Public Comments

(3) *Comment:* One commenter stated that the proposed critical habitat designation improperly characterized "unoccupied habitat" in Nanny Point as "occupied habitat." The commenter claimed the Service proposed to designate areas that are not currently occupied by the species without going through the analysis required by the Act and Service regulations regarding the designation of unoccupied habitat. The commenter further stated that the Service cannot designate these private parcels and easements as "unoccupied" critical habitat because they are not reasonably certain to contribute to the conservation of the species, given the best available science in the record regarding the plant's reproduction, recruitment, and dispersion.

Response: The best available science supports our conclusion that the Nanny Point unit is occupied. It contains the largest known population of marron bacora. Data from Nanny Point (2017, 2018, and 2019) show that individuals of marron bacora occur on both sides of the access corridor (easements), and likely occur along the boundaries of adjacent private parcels.

Our regulations at 50 CFR 424.02 define the "geographical area occupied by the species" as an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.,* range). For marron bacora, we delineated the two units based on the species' occurrences and contiguous suitable habitat that may support the

species; the area within the units contain one or more of the physical and biological features that were identified as essential to the conservation of the species. Additionally, consistent with the regulations at 50 CFR 424.12(d), when several habitats, each satisfying the requirements for designation as critical habitat, are located in proximity to one another, the Secretary may designate an inclusive area as critical habitat. The unit in question contains multiple occurrences of marron bacora that are in close proximity to one another and are connected by continuous forested habitat. Thus, we are designating an inclusive area as critical habitat. The species occurs within the boundaries of the entire unit; therefore, the unit is occupied by marron bacora at the time of listing.

We are designating critical habitat based on the best available commercial and scientific information. As indicated in the proposed rule, we based this critical habitat designation on the species' occurrence data and a habitat suitability model (Palumbo et al. 2016, p. 5; Service 2020, pp. 15–16, 28), which used elevation, slope, soil association, and vegetation types as variables defining the habitat of the species. The needs of the species and its habitat are described in more detail in the SSA report (Service 2020, pp. 12–16). We revised the boundaries of the critical habitat designation based on new elevation data from a recently discovered marron bacora population at Reef Bay Trail, and on the continuity of forested habitat. This approach is consistent with the definition of "geographical area occupied by the species" at 50 CFR 424.02.

(4) *Comment:* A landowner stated that a private parcel and an associated private easement should be excluded from the South Unit because the benefits of exclusion outweigh the benefits of inclusion and the exclusion will not result in extinction of the species. The commenter explained that the conservation efforts already undertaken by the landowner, including "captive propagation from seed and cutting, population enhancement, translocation of plants, and subsequent monitoring," have demonstrably improved and enhanced the survival of the known marron bacora populations,

particularly the Nanny Point population, included in a conservation agreement. The commenter indicated there is a reasonable expectation that the remaining conservation management strategies and actions in the agreement will be implemented and will continue to protect the Nanny Point population.

Response: We have taken into consideration the conservation efforts by the landowner and conducted an exclusion analysis to determine if the area described warrants exclusion from the designated critical habitat. We found that the benefits of exclusion outweigh the benefits of inclusion, and we have excluded this parcel from the final critical habitat designation. Please see *Private or Other Non-Federal Conservation Plans or Agreements and Partnerships*, below, for the details and analysis.

Determination of Marron Bacora's Status

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species meets the definition of an endangered species or a threatened species. The Act defines an "endangered species" as a species in danger of extinction throughout all or a significant portion of its range, and a "threatened species" as a species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether a species meets the definition of endangered species or threatened species because of any of the following factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) Overutilization for commercial, recreational, scientific, or educational purposes; (C) Disease or predation; (D) The inadequacy of existing regulatory mechanisms; or (E) Other natural or manmade factors affecting its continued existence.

We have determined that the primary threats acting on marron bacora are habitat destruction or modification by exotic mammal species (e.g., white-tailed deer, goats, pigs, and donkeys) and invasive plants and exotic, plants (e.g., guinea grass) (Factor A);

herbivory by nonnative, feral ungulates and insect pests (Factor C); and the lack of natural recruitment, absence of dispersers, fragmented distribution and small population size, lack of genetic diversity, and climate change (Factor E).

Status Throughout All of Its Range

After evaluating threats acting on the species and the species' response to those threats, we found that the species is currently in danger of extinction throughout its range. Marron bacora is adapted for life in the dry forests of St. John, USVI, and Tortola, BVI. These islands have endured landscape changes over time and will continue to be affected by human visitation and development. The largest extant population on St. John is within the VINP boundaries and is protected from future development; however, neighboring areas are vulnerable to development as the human population increases. Depredation from ungulates, which occurs even in the VINP, is largely responsible for the low levels of seedling recruitment that have caused the lack of natural recruitment. The species is also affected by insect pests along with habitat degradation by nonnative plants and animals.

There are currently 11 known historical and current populations. Three of these populations are considered extirpated, two are represented by only a single individual (possibly functionally extirpated), and five are represented by very low numbers of individuals. Only the single population at Nanny Point has more than 100 individuals, and between 2010 and 2017, this population declined by over half. Seedlings were discovered at this site, likely assisted by release/reproduction due to opening of canopy/moist soil conditions from the hurricanes, but those seedlings were being affected by ungulate herbivory that was reducing survival. Despite having the greatest number of individuals, Nanny Point is in danger of extirpation due to little or no reproductive output, the continued presence of nonnative mammals, and habitat degradation from recent hurricanes and invasive plant species. Additionally, it has seen an almost 50

percent reduction in the number of individuals over the last 10 years. Across the entire range, the lack of evidence of reproduction/recruitment is resulting in the continued decline of all populations. Reintroductions to date have resulted in limited survival (28 percent) and have not yielded any increase in reproductive success (either have not achieved reproductive status or have not successfully reproduced). Resiliency for all extant populations is low as are redundancy and representation. There is very little evidence of natural recruitment, with recent seedling evidence from only two populations. Due to the lack of recruitment across all populations, the species is at risk of extinction.

Further, the threats acting on the species are likely to continue at the existing rate or increase without management of marron bacora and the identified threats, such as nonnative, invasive species. The species is a narrow endemic and has suffered extirpation of populations across its limited range; most remaining populations have only a single or few individuals. The species has lost redundancy, and remaining populations have low resiliency. The impacts from herbivory by nonnative species have impaired the viability of marron bacora to the point of imminent decline across the species' entire range. Despite efforts to propagate the species and re-establish it in the wild, plants are not reproducing offspring sufficiently to support adequately resilient populations. Thus, after assessing the best available information, we conclude that marron bacora is in danger of extinction throughout all of its range.

Status Throughout a Significant Portion of Its Range

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so in the foreseeable future throughout all or a significant portion of its range. We have determined that marron bacora is in danger of extinction throughout all of its range, and accordingly, did not undertake an analysis to determine whether there may be any significant portion of its range. Because marron

bacora warrants listing as endangered throughout all of its range, our determination does not conflict with the decision in *Center for Biological Diversity* v. *Everson*, 2020 WL 437289 (D.D.C. Jan. 28, 2020), because that decision related to significant portion of the range analyses for species that warrant listing as threatened, not endangered, throughout all of its range.

Determination of Status

Our review of the best scientific and commercial data information indicates that marron bacora meets the Act's definition of an endangered species. Therefore, we are listing marron bacora as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and conservation by Federal, State, Tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act calls for the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species' decline by addressing the threats to its survival and recovery.

The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning consists of preparing draft and final recovery plans, beginning with the development of a recovery outline and making it available to the public. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery plan also identifies recovery criteria for review of when a species may be ready for reclassification from endangered to threatened ("downlisting") or removal from protected status ("delisting"), and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our website (*https://www.fws.gov/endangered*), or from our Caribbean Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Once this species is listed (see **DATES**, above), funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the Territory of the U.S. Virgin Islands will be eligible for Federal funds to implement management actions that promote the protection or recovery of marron bacora. Information on our grant programs that are available to aid species recovery can be found at: *https://www.fws.gov/grants*.

Please let us know if you are interested in participating in recovery efforts for this species. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

Federal agency actions within the species' habitat that may require conference, consultation, or both as described in the preceding paragraph include management and any other landscape-altering activities on Federal lands administered by NPS (Virgin Islands National Park) and privately owned lands that may require a Federal permit.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered plants. The prohibitions of section 9(a)(2) of the Act, codified at 50 CFR 17.61, make it illegal for any person subject to the jurisdiction of the United States to import or export; remove and reduce to possession from areas under Federal jurisdiction; maliciously damage or destroy on any such area; remove, cut, dig up, or damage or destroy on any other area in knowing violation of any law or regulation of a State or in the course of an violation of a State criminal trespass law; deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of commercial activity; or sell or offer for sale in interstate or foreign commerce an endangered plant. Certain exceptions apply to employees of the Service, the National Marine Fisheries Service, other Federal land management agencies, and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered plants under certain circumstances. Regulations governing permit issuance are codified at 50 CFR 17.62. With regard to endangered plants, a permit may be issued for scientific purposes or for enhancing the propagation or survival of the species. There are also certain statutory exemptions from the prohibitions, which are found in section 10 of the Act.

It is our policy, as published in the *Federal Register* on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that will or will not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a listing on proposed and ongoing activities within the range of the listed species. Based on the best available information, the following actions are unlikely to result in a violation of section 9, if these activities are carried out in accordance with existing Federal and Territorial regulations and permit requirements; this list is not comprehensive:

- Recreational use of existing trails and pathways.
- Routine maintenance of existing public roads, trails, and pathways.
- Archeological activities that minimize impacts to native species.
- Landscaping activities within residential areas that do not extend to native vegetation.

Based on the best available information, the following activities may potentially result in a violation of section 9 of the Act if they are not authorized in accordance with applicable laws (this list is not comprehensive):

- Modifying the habitat of the species on Federal lands without authorization (*e.g.*, unauthorized opening of trails within NPS lands); and
- Removing, cutting, digging up, or damaging or destroying of the species on any non-Federal lands in knowing violation of any law or regulation of the Territory of the U.S. Virgin Islands or in the course of any violation of the Territory of U.S. Virgin Islands' criminal trespass law.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Caribbean Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

II. Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (i.e., range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals). Additionally, our regulations at 50 CFR 424.02 define the word "habitat" as, for the purposes of designating critical habitat only, the abiotic and biotic setting that currently or periodically contains the resources and conditions necessary to support one or more life processes of a species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation also does not allow the government or public to access private lands.

Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the Federal agency would be required to consult with the Service under section 7(a)(2) of the Act. However, even if the Service were to conclude that the proposed activity would result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must implement "reasonable and prudent alternatives" to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat).

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. The implementing regulations at 50 CFR 424.12(b)(2) further delineate unoccupied critical habitat by setting out three specific parameters: (1) when designating critical habitat, the Secretary will first evaluate areas occupied by the species; (2) the Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied by the species would be inadequate to ensure the conservation of the species; and (3) for an unoccupied area to be considered

essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act published in the *Federal Register* on July 1, 1994 (59 FR 34271), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the SSA report and information developed during the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States (Territories) and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts' opinions or personal knowledge.

As the regulatory definition of "habitat" reflects (50 CFR 424.02), habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated

area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions found in section 9 of the Act. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical or Biological Features Essential to the Conservation of the Species

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The regulations at 50 CFR 424.02 define “physical or biological features essential to the conservation of the species” as the features that occur in specific areas and that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or

dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of a species might include gravel of a particular size required for spawning, alkaline soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, we may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

The specific physical or biological features required for marron bacora were derived from available observations and current information on the species' habitat, ecology, and life history as described below. To identify the physical and biological needs of the species, we have relied on current conditions at locations where marron bacora occurs. In addition, available literature on the species' genetics, reproductive biology, and habitat modeling were used (Stanford et al. 2013; Anderson et al. 2015; Palumbo et al. 2016).

Summary of Essential Physical or Biological Features

We derive the specific physical or biological features essential to the conservation of the marron bacora from studies of the species' habitat, ecology, and life history as described below. Additional information can be found in the SSA report (Service 2020, entire), which is available on *https://www.regulations.gov* under Docket No. FWS-R4-ES-2019-0050. We have determined that the following physical or biological features are essential to the conservation of marron bacora:

(i) Native forest within the subtropical dry forest life zone in St. John.

(ii) Dry scrubland, deciduous forest, and semi-deciduous forest vegetation at elevations lower than 150 m (492 ft).

(iii) Continuous native forest cover with low abundance of exotic plant species (e.g., *Leucaena leucocephala* and *Megathyrsus maximus*) and that provides the availability of pollinators to secure cross-pollination between populations.

(iv) Habitat quality evidenced by the presence of regional endemic plant species, including *Zanthoxylum thomasianum*, *Peperomia wheeleri*, *Eugenia earhartii*, *Eugenia sessiliflora*, *Cordia rickseckeri*, *Croton fishlockii*, *Malpighia woodburyana*, *Bastardiopsis eggersii*, *Machaonia woodburyana*, and *Agave missionum*.

(v) Open understory with appropriate microhabitat conditions, including shaded conditions and moisture availability, to support seed germination and seedling recruitment.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. All the designated units are occupied by the species at the

time of listing (i.e., are currently occupied) and have mixed ownership of predominantly Federal lands (97 percent) and private lands (3 percent) (see Table 4, below).

The features essential to the conservation of marron bacora may require special management considerations or protection to ameliorate the following stressors: habitat modification and fragmentation (development); erosion (from storm water runoff); feral ungulates (predation); and invasive, exotic plants (habitat intrusion). Special management considerations or protection may be required within critical habitat areas to ameliorate these stressors, and include, but are not limited to: (1) Protect and restore native forests to provide connectivity between known populations and secure availability of pollinators and dispersers; (2) reduce density of feral ungulates; (3) remove and control invasive plants; and (4) avoid physical alterations of habitat to secure microhabitat conditions.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. We are not designating any areas outside the geographical area occupied by the species because we have not identified any unoccupied areas that meet the definition of critical habitat. The critical habitat designation includes all currently occupied areas within the historical range that have retained the necessary physical or biological features to allow for the maintenance and expansion of these existing populations. The occupied areas are sufficient for the conservation of the species.

For areas within the geographic area occupied by the species at the time of listing (i.e., areas that are currently occupied), we delineated critical habitat unit boundaries as

described below. The primary sources of data used to define marron bacora critical habitat include a habitat suitability model (by selecting areas identified as containing moderate- and high-quality habitat for the species) (Palumbo et al. 2016, entire), and validated by recent habitat assessments throughout the species' range. The habitat suitability model included elevation, slope, soil association, and vegetation types and identified approximately 1,717.23 ac (694.94 ha) of high-quality habitat, 3,150.45 ac (1,274.94 ha) of moderate-quality habitat, 3,875.92 ac (1,568.53 ha) of low-quality habitat, 3,319.16 ac (1,343.16 ha) of poor-quality habitat, and 461.79 ac (186.88 ha) of unsuitable habitat (Palumbo et al. 2016, p. 5) on St. John. When adding all hectares of high- and moderate-quality habitat, approximately 32 percent of the land area of VINP may be suitable habitat for marron bacora (Palumbo et al. 2016, p. 5). However, the latest discovered population of marron bacora on St. John at Reef Bay Trail (Service 2017a, p. 11) occurs at elevations higher than what was provided by the model results; thus, the amount of suitable habitat for marron bacora at St. John may include areas higher in elevation, indicating more suitable habitat than previously reported (Palumbo et el. 2016, p. 5). Therefore, the boundaries were slightly expanded to include habitat at higher elevations consistent with the recently discovered population (Reef Bay Trail).

We analyzed recent satellite images to identify areas dominated by native forest vegetation associated with known localities for the species within St. John. Finally, we adjusted the elevation to 492 ft (150 m), as the latest discovered population of marron bacora was at an elevation higher than the records available to Palumbo et al. (2016). We further cropped the units using the contour of the coastline, excluding wetland areas (e.g., ponds) and developed areas. Critical habitat units were then mapped using ArcGIS Desktop version 10.6.1, a geographic information system (GIS) program. We identified two units, North and South, falling within these parameters.

When determining critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features necessary for marron bacora. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action will affect the physical or biological features in the adjacent critical habitat.

We are designating as critical habitat areas that we have determined are occupied at the time of listing (i.e., are currently occupied), that contain one or more of the physical or biological features that are essential to support life-history processes of the species, and that may require special management considerations or protections. The two units, South and North, each contain the physical or biological features that support multiple life-history processes for marron bacora.

Units are designated based on one or more of the physical or biological features being present to support marron bacora's life-history processes. All units contain all of the identified physical or biological features and support multiple life-history processes.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document under **Regulation Promulgation**. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on

https://www.regulations.gov at Docket No. FWS-R4-ES-2019-0050, or on our website, *https://www.fws.gov/office/caribbean-ecological-services/library*.

Final Critical Habitat Designation

We are designating two units as critical habitat for marron bacora. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for marron bacora. The two units we are designating as critical habitat are: (1) South and (2) North. Table 4 shows the critical habitat units, the land ownership, and the approximate area of each unit. Both units are occupied at the time of listing.

Table 4. Critical habitat units for marron bacora with ownership, area, and occupied status. [Area estimates reflect all land within critical habitat unit boundaries.]

Critical Habitat Unit	Land Ownership by Type	Size of Unit in Acres (Hectares)*	Occupied?
1. South	Federal (NPS) Private	1,634 ac (661 ha) 70 ac (28 ha) *Unit total*: 1,704 ac (690 ha)	Yes
2. North	Federal (NPS)	844 ac (341 ha)	Yes
Total		2,548 ac (1,031 ha)	

Note: Area sizes may not sum exactly due to rounding.

We present brief descriptions of both units, and reasons why they meet the definition of critical habitat for marron bacora, below.

Unit 1: South

Unit 1 consists of 1,704 ac (690 ha). Approximately 1,634 ac (661 ha) are managed by NPS within the VINP, and approximately 70 ac (28 ha) are in private ownership adjacent to the east corner of VINP. This unit is within the geographical area occupied by marron bacora at the time of the listing. This unit harbors the largest population and core of known individuals of marron bacora in St. John, USVI. It contains all of the identified physical or biological features essential to the conservation of marron

bacora. We have excluded 1.33 ac (0.54 ha) acres from this unit (see *Exclusions Based on Other Relevant Impacts*, below).

Ongoing and potential threats or activities that occur in this unit are urban development, trampling and predation by feral ungulates, and forest management actions (e.g., conservation/restoration, recreation, trail maintenance, roads, control of feral mammals, and fire management control). Special management considerations or protection measures to reduce or alleviate the threats may include minimizing or avoiding habitat modification or fragmentation from urban and recreational development, protecting and restoring native forests to provide connectivity between known populations and to secure availability of pollinators and dispersers, reducing the density of feral ungulates, and removing and controlling invasive plants.

Unit 2: North

Unit 2 consists of 844 ac (341 ha) of federally owned land managed by NPS within the VINP. This unit is within the geographical area occupied by marron bacora at the time of listing and harbors the habitat structure that supports marron bacora's viability. This unit contains all of the identified physical or biological features essential to the conservation of marron bacora.

Ongoing and potential threats or activities that occur in this unit are roaming feral mammals and forest management actions (e.g., conservation/restoration, recreation, trails, roads, control of feral mammals, and fire management control). Special management considerations or protection measures to reduce or alleviate the threats may include protecting and restoring native forests to provide connectivity between known populations and to secure availability of pollinators and dispersers, reducing density of feral ungulates, removing and controlling invasive plants, and avoiding physical modification of habitat to secure microhabitat conditions.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must consult with us. Examples of actions that are subject to the section 7 consultation process are actions on State, Tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq*.) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat—and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency—do not require section 7 consultation.

Compliance with the requirements of section 7(a)(2), is documented through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define "reasonable and prudent alternatives" (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Service Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinitiate formal consultation on previously reviewed actions. These requirements apply when the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law) and, subsequent to the previous consultation: (1) if the amount or extent of taking specified in the incidental take statement is exceeded; (2) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the

biological opinion; or (4) if a new species is listed or critical habitat designated that may be affected by the identified action.

In such situations, Federal agencies may need to request reinitiation of consultation with us, but the regulations also specify some exceptions to the requirement to reinitiate consultation on specific land management plans after subsequently listing a new species or designating new critical habitat. See the regulations for a description of those exceptions.

Application of the "Destruction or Adverse Modification" Standard

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may violate 7(a)(2) of the Act by destroying or adversely modifying such habitat, or that may be affected by such designation.

Activities that the Service may, during a consultation under section 7(a)(2) of the Act, consider likely to destroy or adversely modify critical habitat include, but are not limited to:

(1) Actions that would significantly alter the structure of the native forest. Such activities could include, but are not limited to, habitat fragmentation and development (e.g., from recreational facilities and activities like trails, hiking, bicycling, using all-terrain vehicles (ATVs); herbicide and pesticide use on private lands; and urban and tourist developments). In addition, habitat modification may promote habitat

encroachment by invasive plant species, thus promoting favorable conditions for human-induced fires. These activities could degrade the habitat necessary for marron bacora populations to expand.

(2) Actions that would increase habitat modification. Such activities could include, but are not limited to, predation and erosion caused by feral animals, and risk of human-induced fires. These activities could significantly reduce the species' recruitment and could exacerbate the vulnerability of the species to stochastic events (e.g., hurricanes).

Exemptions

Application of Section 4(a)(3) of the Act

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DoD), or designated for its use, that are subject to an integrated natural resources management plan (INRMP) prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation. There are no DoD lands with a completed INRMP within the final critical habitat designation.

Consideration of Impacts under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as

critical habitat will result in the extinction of the species. In making the determination to exclude a particular area, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

On December 18, 2020, we published a final rule in the *Federal Register* (85 FR 82376) revising portions of our regulations pertaining to exclusions of critical habitat. The final regulations became effective on January 19, 2021, and apply to critical habitat rules for which a proposed rule was published after January 19, 2021. Consequently, these new regulations do not apply to this final rule.

We describe below the process that we undertook for taking into consideration each category of impacts and our analyses of the relevant impacts.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive due to the protection from destruction of adverse modification as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When identifying the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation or in the continuation, strengthening, or encouragement of partnerships. In the case of marron bacora, the benefits of critical habitat include public awareness of the presence of the species and the importance of habitat protection, and, where a Federal nexus exists, increased habitat protection for marron bacora due to the protection from destruction or adverse modification of critical habitat. Additionally, continued implementation of an ongoing management plan that provides equal to or more conservation than a critical habitat designation would reduce the benefits of including that specific area in the critical habitat designation.

We evaluate the existence of a conservation plan when considering the benefits of inclusion. We consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction of the species. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Exclusions Based on Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. In order to consider economic impacts, we prepared an incremental effects memorandum (IEM) and screening analysis which, together with our narrative and interpretation of effects, we consider our economic analysis of the critical habitat designation and related factors (IEc 2019, entire). The analysis, dated October 15, 2019 (IEc 2019, entire), was made available for public review from August 26, 2020, through October 26, 2020 (85 FR 52516; August 26, 2020). The economic analysis addressed probable economic impacts of critical habitat designation for marron bacora. We did not receive any additional information on economic impacts during the public comment period to inform

whether any specific areas should be excluded from the final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19. The IEM and economic screening analysis with supporting documents may be found on *https://www.regulations.gov* in Docket No. FWS-R4-ES-2019-0050.

We considered the economic impacts of the critical habitat designation. The Secretary is not exercising her discretion to exclude any areas from this designation of critical habitat for the marron bacora based on economic impacts.

Exclusions Based on Impacts to National Security and Homeland Security

In preparing this final rule, we have determined that there are no lands within the critical habitat designation for marron bacora that are owned or managed by the DoD or Department of Homeland Security; therefore, we anticipate no impact on national security. Additionally, we did not receive any information through the public comment period on the impacts of the proposed designation on national security or homeland security that would support excluding any specific areas from this final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether there are permitted conservation plans covering the species in the area such as HCPs, safe harbor agreements, or candidate conservation agreements with assurances (CCAAs), or whether there are non-permitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at the existence of Tribal conservation plans and partnerships and consider the government-to-government relationship of the United States with Tribal entities. We also consider any social impacts that might occur because

of the designation.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive due to the protection from destruction or adverse modification as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When considering the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation, or in the continuation, strengthening, or encouragement of partnerships. In preparing this final rule, we determined that there are currently no HCPs or other management plans for the marron bacora and the final designation does not include any Tribal lands or trust resources. Therefore, we anticipate no impacts on Tribal lands, partnerships, or HCPs from this final critical habitat designation.

In the paragraphs below, we provide a detailed balancing analysis of the areas we evaluated for exclusion from critical habitat under section 4(b)(2) of the Act.

Private or Other Non-Federal Conservation Plans or Agreements and Partnerships

During the development of this final designation, we considered additional information we received through the public comment period regarding other relevant impacts to determine whether any specific areas should be excluded from this final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19. As described above in **Summary of Comments and Recommendations**, we received one request to exclude an area from the final critical habitat designation that provided sufficient information to conduct an exclusion analysis of the area.

Based on the information provided by entities seeking exclusion, as well as additional public comments we received, and the best scientific data available, we

evaluated whether certain lands in the proposed critical habitat (South Unit) are appropriate for exclusion from this final designation under section 4(b)(2) of the Act. If the analysis indicates that the benefits of excluding lands from the final designation outweigh the benefits of designating those lands as critical habitat, then the Secretary may exercise her discretion to exclude the lands from the final designation. In the paragraphs below, we provide a detailed analysis of whether the benefits of excluding this area outweigh the benefits of including it under section 4(b)(2) of the Act.

South Unit

The subject area is a 1.33-ac (0.54-ha) private parcel and easement extending onto NPS lands at Nanny Point for access, parking, fencing, and utilities corridors. The parcel of land includes use restrictions, which ensure that 79 percent of the land will remain forested with native vegetation. The landowner has implemented conservation efforts, including captive propagation from seed and cutting, population enhancement, translocation of plants, and subsequent monitoring, and has demonstrably improved and enhanced the survival of the Nanny Point population. As part of the acquisition of this parcel, the landowner also negotiated a separate purchase and donation of an additional parcel to NPS of approximately 5.36 ac (2.17 ha) and the above referenced easements. Additionally, further land use covenants and restrictions were imposed on adjacent private parcels, covering approximately 15 ac (6.1 ha) of land surrounding the marron bacora population at Nanny Point. The restrictions limit the development of these parcels and ensure the habitat will remain at least 75 percent forested. Through the years, the private landowner has demonstrated commitment to the conservation of marron bacora through efforts such as propagating the species, providing us with information about the species, and ongoing conservation efforts such as fencing to exclude feral mammals from the Nanny Point population.

Benefits of Inclusion—1.33-ac (0.54-ha) parcel: The principal benefit of including an area in critical habitat designation is the requirement of Federal agencies to ensure that actions that they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, which is the regulatory standard of section 7(a)(2) of the Act under which consultation is completed. Federal agencies must consult with the Service on actions that may affect a listed species and refrain from actions that are likely to jeopardize the continued existence of such species. The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Thus, critical habitat designation may provide greater benefits to the recovery of a species than listing would alone.

Accordingly, a critical habitat designation may provide a regulatory benefit for marron bacora on the 1.33-ac (0.54-ha) private parcel when there is a Federal nexus present for a project that might adversely modify critical habitat. However, as stated above, adverse modification considers whether implementation of a proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole. Given the small size of the area and existing land use restrictions, which ensure 79 percent of the area will remain suitable habitat for marron bacora, even if an action were proposed that had a Federal nexus, it is highly unlikely that such an action could affect the area in a way that would adversely modify it. Accordingly, the benefit of inclusion of this parcel is limited.

As mentioned previously, the landowner has a proven track record of implementing conservation actions for marron bacora, which further reduces the benefits of inclusion of this parcel in critical habitat. These conservation actions provide a greater benefit to the species than a designation of critical habitat because the landowner's actions include implementing affirmative conservation actions, including propagation, planting, and monitoring activities, as well as exclusion of feral animals. Therefore, the

existing conservation activities on this parcel will provide greater benefit than the regulatory designation of critical habitat, which requires only the avoidance of adverse modification and does not require implementation of the types of conservation activities that are currently being conducted at this site.

Another potential benefit of including lands in a critical habitat designation is that doing so raises the awareness of landowners, State and local governments, and the public regarding the potential conservation value of an area. This increased public awareness of the importance of areas to marron bacora can help to focus attention of those areas that are of high conservation value. However, we find that the landowner's track record of implemented conservation actions for marron bacora demonstrate awareness of the conservation value of the area, and the benefits of inclusion of this parcel in critical habitat are significantly reduced. Additionally, the inclusion of the larger amount of adjacent NPS lands within critical habitat will provide sufficient opportunity for us to raise public awareness of the imperiled status of the marron bacora for this area generally.

Benefits of Exclusion—1.33-ac (0.54-ha) parcel: The benefits of excluding the 1.33 ac (0.54 ha) of land from the designation of critical habitat are substantial. The parcel will continue to provide conservation to the species by contributing to educational benefits and public awareness through the following ways: (1) Continuing and strengthening of our effective working relationship with private landowners within the Nanny Point population to promote voluntary, proactive conservation and recovery of the marron bacora and its habitat; and (2) fostering future collaboration with private parties for other federally listed and sensitive species.

In the case here, the substantial benefits of excluding the 1.33-ac (0.54-ha) private parcel include the recognition of the important role of voluntary conservation actions in the conservation of marron bacora, facilitating cooperation with neighboring landowners,

and acknowledging the good faith efforts on their part to date in conserving marron bacora. The landowner of the 1.33-ac (0.54-ha) parcel has implemented and collaborated on conservation efforts, including captive propagation from seed and cutting, population enhancement, translocation of plants, and subsequent monitoring. These efforts have demonstrably improved and enhanced the survival of the Nanny Point population. Although the landowner is likely to continue to collaborate with us even if we do not exclude the private parcel and associated easements from designation, recognizing the collaborative relationship with the private landowner can create a substantial incentive for other landowners interested in voluntarily conserving marron bacora and other listed or unlisted species in need of conservation but might be concerned that their efforts might result in additional future regulation. Because we value the voluntary and collaborative conservation efforts that have occurred to date and that likely will continue, we place great weight on the maintenance of this conservation partnership. Thus, excluding this area from the critical habitat designation will maintain the valuable collaborative relationship with the landowner of the parcel and foster partnerships with other landowners within the range of marron bacora. Additionally, the exclusion of this parcel from critical habitat designation may also serve as a model for the advantages of voluntary and proactive conservation efforts, thereby fostering future cooperative relationships with non-Federal parties for the benefit of other endangered or threatened species. For these reasons, we consider the positive effect of excluding the 1.33-ac (0.54-ha) parcel from critical habitat to be a significant benefit.

Benefits of Exclusion Outweigh the Benefits of Inclusion—1.33-ac (0.54-ha) parcel: The primary benefit of including this parcel as critical habitat for marron bacora is the regulatory requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. The additional regulatory benefits of including these lands as

critical habitat are limited due to the small size of the parcel and long-term protection of the parcel conferred by existing land use restrictions and covenants. Furthermore, these lands are occupied by marron bacora, and we anticipate that if a Federal nexus exists and triggers the need for section 7 consultation, there will be no difference between conservation recommendations to avoid jeopardy and conservation recommendations to avoid adverse modification in occupied areas of critical habitat. The benefits of including this parcel in critical habitat are reduced due to the prior and ongoing conservation actions on this parcel, which provide a greater benefit than the regulatory designation of critical habitat.

Another benefit of including this parcel in critical habitat is the opportunity to educate the landowner and the public regarding potential conservation value of the area. However, we have determined that the educational benefits of a designation of critical habitat are minimal due to the prior and ongoing conservation activities on this parcel and the greater relative contribution that adjacent NPS lands provide for educational opportunities.

In contrast, the benefits of excluding this parcel are significant and greater than inclusion for the following reasons. Because voluntary conservation efforts for the benefit of listed species on non-Federal lands are so valuable, we consider the maintenance and encouragement of conservation partnerships to reduce or mitigate negative effects on the species caused by activities on or adjacent to the area covered by a plan. Including the parcel could undermine the collaborative and valuable partnership with the private landowner, as the landowner has worked with us in good faith to further the conservation of the species. Given concerns from the landowner about added regulation imposed by critical habitat designation, inclusion of the parcel may be perceived as lack of good faith on the part of the Service and a lack of appreciation for the landowner's efforts towards conservation. Excluding the area from critical habitat, on the other hand, recognizes and

will strengthen the collaborative partnership and aid in fostering future cooperative relationships with other parties for the benefit of marron bacora. Furthermore, excluding the 1.33-ac (0.54-ha) parcel will demonstrate the significant advantages of proactive, voluntary efforts for other imperiled species by providing positive incentives and removing real or perceived disincentives for landowners who might be considering implementing conservation activities. Thus, we find the partnership benefits are significant and outweigh the small potential regulatory benefits of including the land in the final critical habitat designation.

Therefore, for the reasons stated above, the Secretary has determined that the benefits of excluding the 1.33-ac (0.54-ha) parcel outweigh the benefits of including this area in a designation of critical habitat.

Exclusion Will Not Result in Extinction of the Species—1.33-ac (0.54-ha) parcel: We determined that the exclusion of 1.33 ac (0.54 ha) of land within the boundaries of the South Unit will not result in extinction of the taxon. The small size of the parcel and the long-term protection conferred by the land use restrictions and covenants provide assurances that marron bacora will not go extinct as a result of excluding the area from the critical habitat designation. Furthermore, for any projects having a Federal nexus and potentially affecting the marron bacora, the jeopardy standard of the Act will provide a level of assurance that this species will not go extinct as a result of excluding this parcel from the critical habitat designation.

Summary of Exclusions

As discussed above, based on the information provided by a landowner seeking exclusion, we evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation pursuant to section 4(b)(2) of the Act. As displayed below in Table 5, we are excluding the following area from the critical habitat designation for the marron bacora: 1.33 ac (0.54 ha) of land within the boundaries

of Unit 1 (South Unit). The excluded area falls within State Concordia in southeastern St. John, in an area known as Nanny Point and located in the proximity of the biggest know population of marron bacora in lands recently donated to NPS.

Table 5. Areas excluded from critical habitat designation by critical habitat unit.

Unit	Specific Area	Areas Meeting the Definition of Critical Habitat, in Acres (Hectares)	Area Excluded from Critical Habitat, in Acres (Hectares)
Unit 1	South Unit, St. John, U.S. Virgin Islands.	1,704 ac (690 ha)	1.33 ac (0.54 ha)

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs in the Office of Management and Budget will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq*.), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself; in other words, the RFA does not require agencies to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies will be directly regulated by this critical habitat designation. There is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities will be directly regulated by this rulemaking, we certify that this critical habitat designation will not have a significant economic impact on a substantial number of small entities.

In summary, we have considered whether this designation will result in a significant economic impact on a substantial number of small entities. For the above reasons and based on currently available information, we certify that this critical habitat designation will not have a significant economic impact on a substantial number of small business entities. Therefore, a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. In our economic analysis, we did not find that this designation of critical habitat will significantly affect energy supplies,

distribution, or use due to the absence of any energy supply or distribution lines in the critical habitat designation. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq*.), we make the following finding:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or Tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or Tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of

Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because the lands designated as critical habitat are primarily Federal lands (97 percent), with a small amount of private land (3 percent). Small governments will be affected only to the extent that any programs involving Federal funds, permits, or other authorized activities must ensure that their actions would not adversely affect the designated critical habitat. Therefore, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for marron bacora in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat

designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed for the designation of critical habitat for marron bacora, and it concludes that this designation of critical habitat does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this final rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this critical habitat designation with, appropriate Territorial resource agencies. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, this rule does not have substantial direct effects either on the States or Territory, or on the relationship between the Federal Government and the Territory, or on the distribution of powers and responsibilities among the various levels of government. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical or biological features of the habitat necessary for the conservation of the species are specifically

identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist Territory and local governments in long-range planning because they no longer have to wait for case-by-case section 7 consultations to occur.

Where Territory and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this rule identifies the elements of physical or biological features essential to the conservation of the species. The areas of designated critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We have determined that no Tribal lands fall within the range of the marron bacora or the boundaries of the designated critical habitat, so no Tribal lands will be affected by the listing or critical habitat designation.

References Cited

A complete list of references cited in this rulemaking is available on the internet at *https://www.regulations.gov* in Docket No. FWS-R4-ES-2019-0050 and upon mailed

request to the Caribbean Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this rule are the staff members of the Fish and Wildlife Service's Caribbean Ecological Services Field Office and Species Assessment Team.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

AUTHORITY: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99--625, 100 Stat. 3500; unless otherwise noted.

2. Amend § 17.12, in paragraph (h), by adding an entry for "*Solanum conocarpum*" to the List of Endangered and Threatened Plants in alphabetical order under FLOWERING PLANTS to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Scientific name	Common name	Where listed	Status	Listing citations and applicable rules
FLOWERING PLANTS				
* * * * * * *				
Solanum conocarpum	Marron bacora	Wherever found	E	87 FR [Insert *Federal Register* page where the document begins], [Insert date

				of publication in the *Federal Register*]; 50 CFR 17.96(a).[CH]
* * * * * * *				

3. Amend § 17.96, in paragraph (a), by adding an entry for "Family Solanaceae: *Solanum conocarpum* (marron bacora)" in alphabetical order to read as follows:

§ 17.96 Critical habitat—plants.

(a) * * *

Family Solanaceae: *Solanum conocarpum* (marron bacora)

(1) Critical habitat units are depicted for St. John, U.S. Virgin Islands, on the maps in this entry.

(2) Within these areas, the physical or biological features essential to the conservation of marron bacora consist of the following components:

(i) Native forest within the subtropical dry forest life zone in St. John.

(ii) Dry scrubland, deciduous forest, and semi-deciduous forest vegetation at elevations lower than 150 meters (492 feet).

(iii) Continuous native forest cover with low abundance of exotic plant species (e.g., *Leucaena leucocephala* and *Megathyrsus maximus*) and that provides the availability of pollinators to secure cross-pollination between populations.

(iv) Habitat quality evidenced by the presence of regional endemic plant species, including *Zanthoxylum thomasianum*, *Peperomia wheeleri*, *Eugenia earhartii*, *Eugenia sessiliflora*, *Cordia rickseckeri*, *Croton fishlockii*, *Malpighia woodburyana*, *Bastardiopsis eggersii*, *Machaonia woodburyana*, and *Agave missionum*.

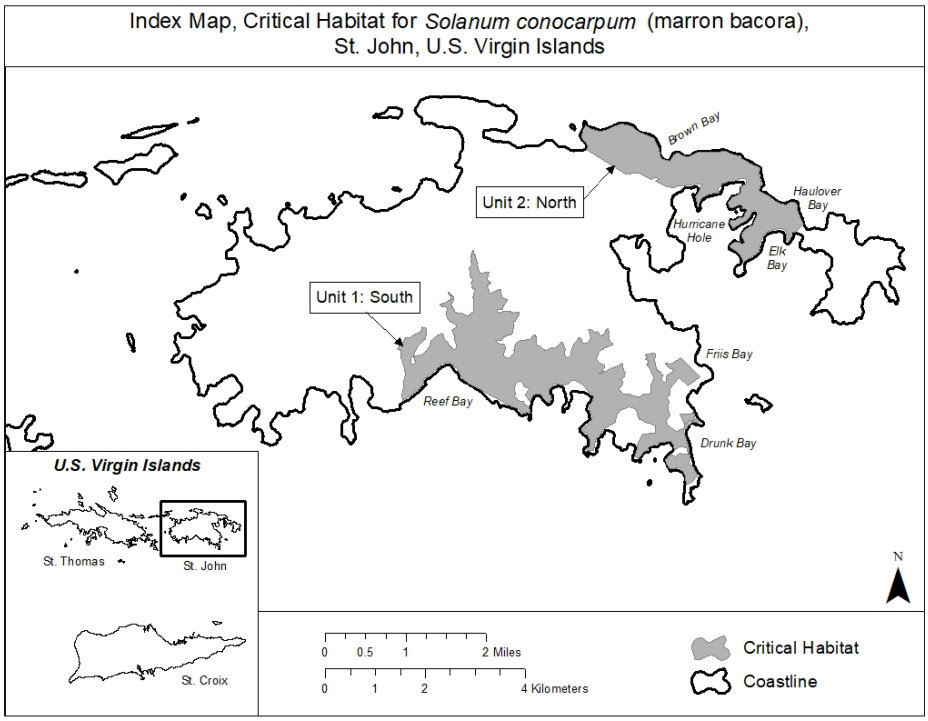
(v) Open understory with appropriate microhabitat conditions, including shaded conditions and moisture availability, to support seed germination and seedling recruitment.

(3) Critical habitat does not include human-made structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(4) Data layers defining map units were created using ArcMap version 10.6.1 (Environmental Systems Research Institute, Inc.), a Geographic Information Systems program on a base of USA Topo Map and the program world imagery. Critical habitat units were then mapped using NAD 1983, State Plane Puerto Rico and Virgin Islands FIPS 5200 coordinates. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site at *https://www.fws.gov/office/caribbean-ecological-services/library*, at *https://www.regulations.gov* at Docket No. FWS-R4-ES-2019-0050, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Note: Index map follows:

Figure 1 to *Solanum conocarpum* (marron bacora) paragraph (5)

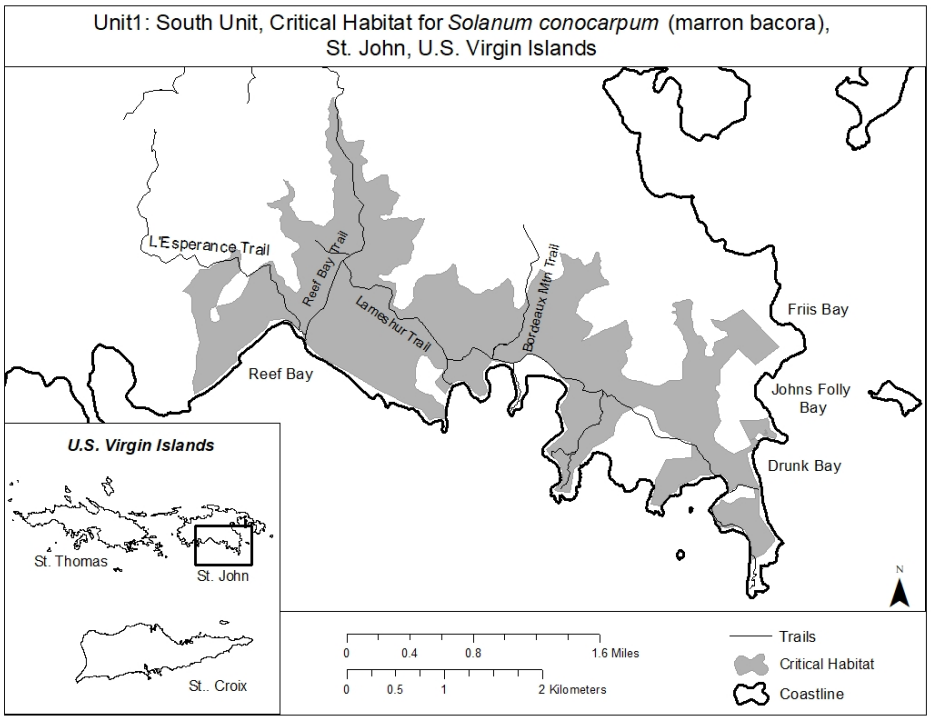


(6) Unit 1: South Unit, St. John, U.S. Virgin Islands.

(i) Unit 1 consists of 1,704 acres (ac) (690 hectares (ha)) in estates Rustenberg & Adventure, Sieben, Mollendal & Little Reef Bay, Hope, Reef Bay, Lameshur Complex, Mandal, Concordia A, Concordia B, St. Quaco & Zimmerman, Hard Labor, Johns Folly and Friis. Lands are composed of 1,634 ac (661 ha) of Federal lands managed by the U.S. National Park Service and 70 ac (28 ha) of privately owned lands.

(ii) Map of Unit 1 follows:

Figure 2 to *Solanum conocarpum* (marron bacora) paragraph (6)(ii)

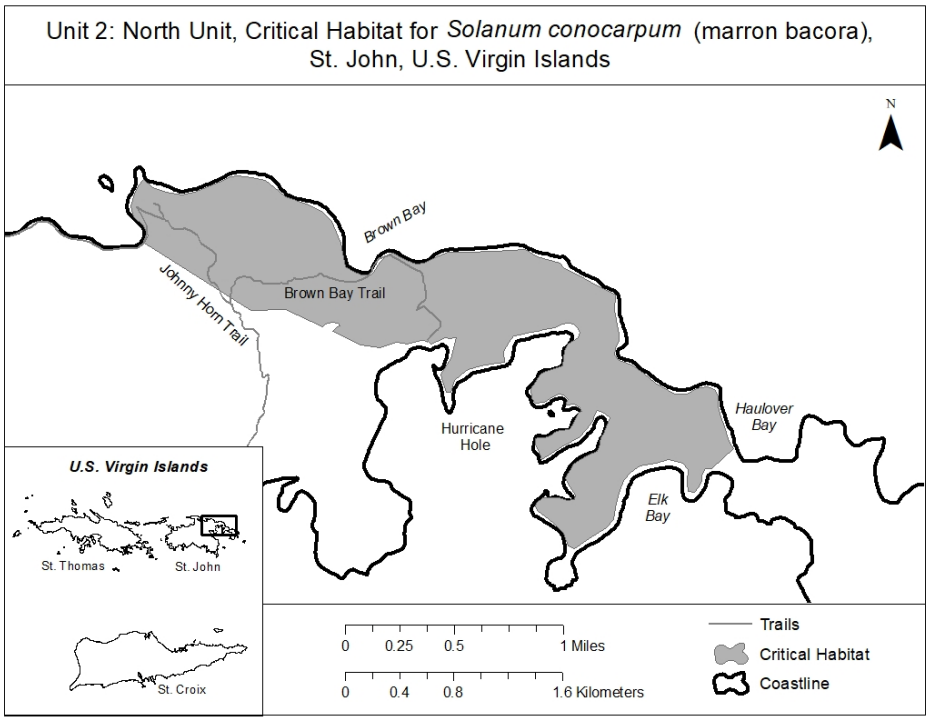


(7) Unit 2: North Unit, St. John, U.S. Virgin Islands.

(i) Unit 2 consists of 844 ac (341 ha) in estates Leinster Bay, Browns Bay, Zootenvaal, Hermitage, Mt. Pleasant and Retreat, Haulover, and Turner Point. The unit is composed entirely of Federal lands managed by the U.S. National Park Service.

(ii) Map of Unit 2 follows:

Figure 3 to *Solanum conocarpum* (marron bacora) paragraph (7)(ii)



* * * * *

Martha Williams,
Director,
U.S. Fish and Wildlife Service.

[FR Doc. 2022-12944 Filed: 6/15/2022 8:45 am; Publication Date: 6/16/2022]